## ABSTRACT OF THE DISCLOSURE

A method to pre-compile configuration information for a network connection device includes receiving a rule file defining behavioral requirements for the network connection device. An operations file, describing operations supported by a plurality of components of the network connection device, is received. A rule program, executable by the network connection device, is generated utilizing the rule file and the operations file. The rule program comprises a set of operations, selected from operations supported by the plurality of components of the network connection device, for performance by the respective components of the network connection device in accordance with the behavioral requirements defined by the rule file.